ABSTRACT

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A soft magnetic material includes a composite magnetic particle (30) and an organic substance (40). The composite magnetic particle (30) has a metallic magnetic particle (10) and a coating layer (20) coating the metallic magnetic particle (10) and containing an oxide therein. The organic substance (40) is formed by adding at least one of a thermoplastic resin and a higher fatty acid having an effect of increasing resistivity of the material, to a non-thermoplastic resin having an effect of improving durability such as material fatigue limit. The organic substance (40) is contained in the soft magnetic material by not less than 0.001% by mass and not more than 0.2% by mass. The present invention provides a soft magnetic material having high magnetic property and mechanical strength and also having fatigue property and resistivity satisfying durability enough for use as a motor core or the like, and a method for manufacturing the same. Further, the invention provides a motor core and a transformer core made of the soft magnetic material. A core loss can significantly be reduced in a motor core made of the soft magnetic material.

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